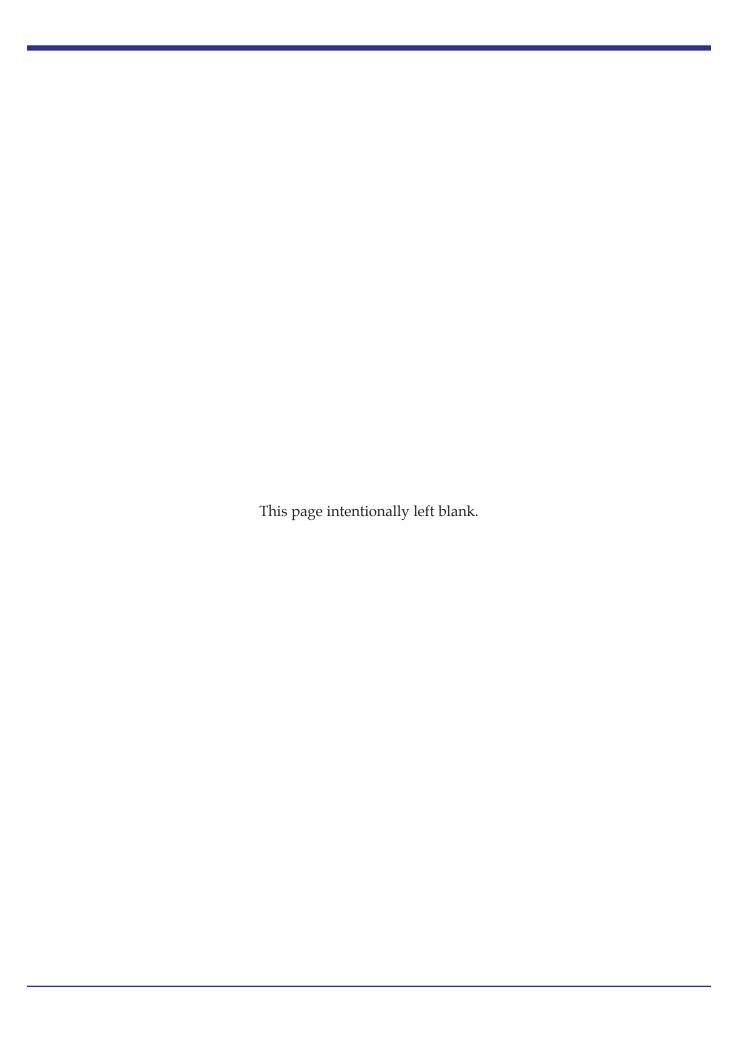
U.S. Department of Energy

# Performance and Accountability Report

Fiscal Year 2004

# MANAGEMENT'S DISCUSSION AND ANALYSIS



# Department at a Glance



President Truman signing the Atomic Energy Act and creating the Atomic Energy Commission in August 1946.

#### **History**

The origins of the Department can be traced to the Manhattan Project and the race to develop the atomic bomb during World War II. Following the war, Congress engaged in a contentious debate over civilian versus military control of the atom. This debate was settled by the creation of the Atomic Energy Commission in 1946 to take control over the scientific and industrial complex supporting the Manhattan Project and to maintain civilian government control over the field of atomic research and development. Throughout the early Cold War Years, the Commission focused on designing and producing nuclear weapons and developing nuclear reactors for naval propulsion. In 1954 the exclusive Government use of the atom ended, spurring growth in the commercial nuclear power industry. The Atomic Energy Commission was given the authority to regulate this new industry. During the 1970's the Atomic Energy Commission was abolished and two new agencies were created in 1974: the Nuclear Regulatory Commission to regulate the nuclear power industry, and the Energy Research and Development Administration to manage the nuclear weapon, naval reactor, and energy development programs. The extended energy crisis of the 1970's demonstrated the Nation's need for unified energy organization. In October 1977, Congress passed the Department of Energy Organization Act, creating the Department of Energy. That legislation brought together for the first time not only most of the government's energy programs but also science and technology programs and defense responsibilities that included the design, construction and testing of nuclear weapons. Creating the Department of Energy consolidated the responsibilities of the Energy Research and Development Administration and organizational entities from a dozen departments and agencies.

The Department provided the framework for a comprehensive and balanced national energy policy by coordinating and administering the energy functions of the Federal Government. The Department undertook responsibility for long-term, high-risk research and development of energy technology, power marketing, energy efficiency, the nuclear weapons program, energy regulatory programs, and a central energy data collection and analysis program.



President Carter signing the Department of Energy Organization Act in August 1977.

Over its history, the Department has shifted its emphasis and focus as the needs of the Nation have changed. During the late 1970's the Department emphasized energy development and regulation. In the 1980's, nuclear weapons research, development, and production took priority. Since the end of the Cold War, the Department has focused on environmental cleanup of the nuclear weapons complex, nuclear nonproliferation and nuclear weapons stewardship, reliable energy supplies and delivery, energy efficiency and conservation, and technology transfer. Today, the Department contributes to the future of the Nation by ensuring our energy security, maintaining the safety and reliability of our nuclear stockpile, cleaning up the environment from the legacy of the Cold War, and developing innovation in science and technology.

In support of our mission to provide national security we have improved one of our highest priorities, safeguarding and securing our sites and facilities. The Department is implementing a revised Design Basis Threat, the post September 11th analysis of potential threats against our sites and materials across the country. Security procedures at our sites and locations have undergone a highlevel review conducted by some of the Nation's top military and civilian experts.

The Department is pursuing new technologies to meet future energy and environmental challenges. These are transformative technologies that will change the way we think about, use and produce energy. The Department is paving the path toward

a "Hydrogen Economy" with affordable zero emission fuel cell vehicles, abundant production sources, and safe storage and transportation of hydrogen. Hydrogen holds tremendous promise to help meet our Nation's future energy challenges, and the Department is at the forefront of implementing the President's Hydrogen Fuel Initiative. The Department is also developing carbon sequestration and using advanced power production technologies to ensure the Nation's coal reserves can be used with far less environmental impact.



Fuel Cell zero emissions vehicle combines hydrogen fuel with oxygen from the air to create electricity for power.



Secretary of Energy promoting a Hydrogen Economy.

The Department's fossil programs are carrying out the President's Coal Research Initiative by working to dramatically improve the efficiency and environmental protections being developed for coal burning power production. The Department has launched an ambitious FutureGen program that will create the world's first near-zero emissions coal plant.

The Strategic Petroleum Reserve and the Northeast Home Heating Oil Reserve are key elements of our Nation's energy security and serve as resource options for the President to use to protect American citizens from disruptions in commercial energy supplies. The President has directed the Department to fill the Strategic Petroleum Reserve to 700 million barrels. The two million barrel Northeast Home Heating Oil Reserve remains ready to respond to a Presidential order should there be a severe fuel oil supply disruption in the Northeast.



A tanker offloading Strategic Petroleum Reserve oil into a storage area along Gulf coast. Storage areas reduce the Nation's vulnerability to a shortage of petroleum in the event of a severe supply disruption.

The Department is taking steps to ensure nuclear energy plays an important role in our future energy mix. Our scientists are pursuing an advanced fuel cycle to significantly improve fuel performance, energy utilization, and proliferation resistance for nuclear reactors. International work is also occurring to develop the next generation of nuclear technologies to take us to the next level in terms of efficiency, reliability, and security.

The Department has made progress in accelerating its environmental cleanup efforts to ensure that the legacy of the work done throughout our Cold War weapons complex does not become community burdens for future generations. While this task continues to be a significant challenge that will require unprecedented funding requirements, the

Department has implemented reforms to accelerate completion of the cleanup program by 35 years, saving American taxpayers nearly \$50 billion. The Department has also made progress towards another challenging effort to develop a permanent nuclear waste repository that will consolidate nuclear waste in one safe, secure location at Yucca Mountain in Nevada. While future long-standing financial commitments will be required, the success of the Yucca Mountain project will ensure that nuclear power remains part of the Nation's fuel mix.



The Yucca Mountain facility experimenting with robotic technologies.

The Department has also focused on the safety and health of its workers by accelerating the processing of applications by employees of contractors who may have become ill as a result of their work at the Department's facilities. The Department is committed to doing what's right and taking care of those whose labors helped secure our safety.

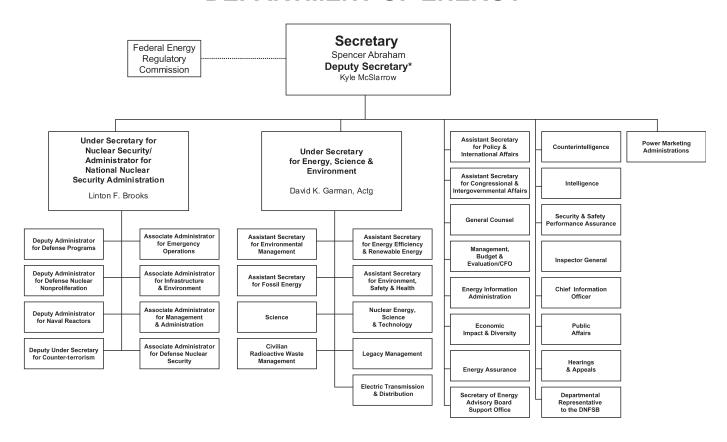
The Department strives to build on our successes of the past while working to meet the challenges that confront us today. To prepare for tomorrow and beyond, the Department will focus its resources on its mission and carry out its responsibilities to ensure America's national security and technological preeminence well into the future.

#### **Mission**

To advance the national economic and energy security of the United States; To promote scientific and technological innovation in support of that mission; To ensure the environmental cleanup of the national nuclear weapons complex.

# **Organization**

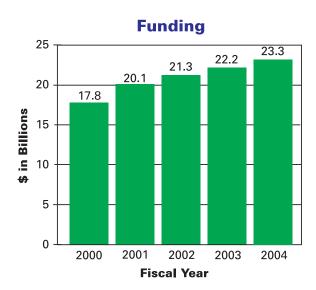
#### **DEPARTMENT OF ENERGY**

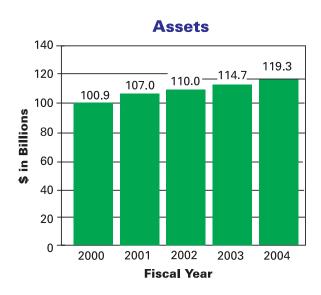


<sup>\*</sup> The Deputy Secretary also serves as the Chief Operating Officer

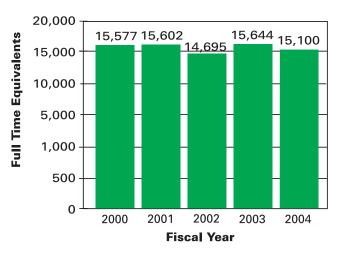
6 Mission U.S. Department of Energy

# **Resources**

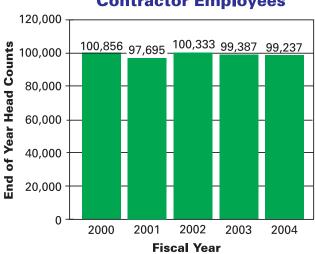




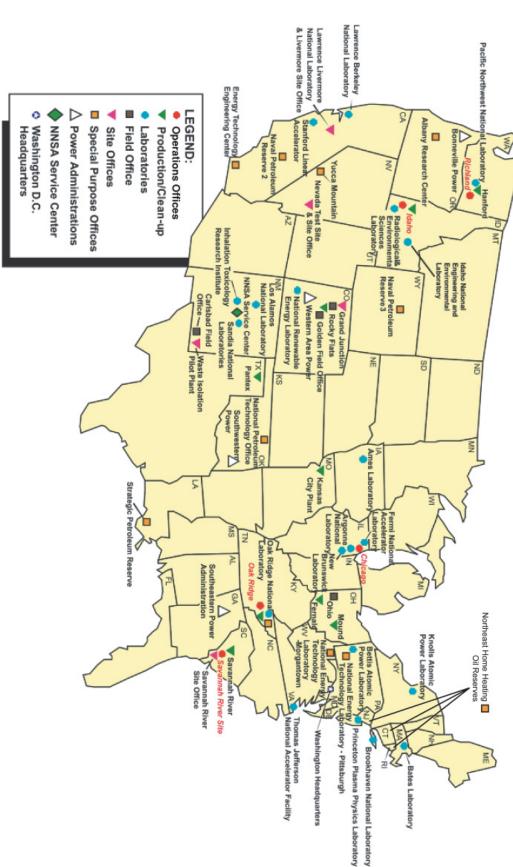
#### **Federal Employees**



#### **Contractor Employees**



# **Offices and Field Facilities**



# **Strategic Goals**

The Department pursues the following four strategic goals and seven supporting general goals to achieve our mission. The performance, financial and other related information presented in this report is structured around these goals.

#### **Strategic and General Goals**

#### **Resources Applied (in millions)**

#### Defense Strategic Goal

To protect our national security by applying advanced science and nuclear technology to the Nation's defense.

#### General Goals

- Maintain nuclear weapons stockpile
- Detect and prevent nuclear proliferation
- Support nuclear power needs of the U.S. Navy



Program Costs \$ 8,061



Federal Employees 2,359\*

#### Energy Strategic Goal

To protect our national and economic security by promoting a diverse supply and delivery of reliable, affordable, and environmentally sound energy.

#### General Goals

Enhance energy security



Program Costs \$ 6,378



Federal Employees 6,808\*

#### Science Strategic Goal

To protect our national and economic security by providing world-class scientific research capacity and advancing scientific knowledge.



Program Costs \$ 3,196



Federal Employees 960\*

#### General Goals

Maintain a world-class scientific research capacity

#### **Environment Strategic Goal**

To protect the environment by providing a responsible resolution to the environmental legacy of the Cold War and by providing for the permanent disposal of high-level radioactive waste.

#### General Goals

- Clean up contamination of sites
- Establish a permanent repository for high-level radioactive waste.



Program Costs \$ 6,813



Federal Employees 1,804\*

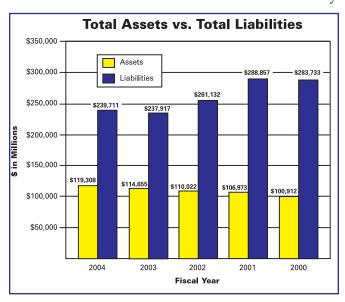
<sup>\*</sup> These Federal Employee numbers do not include Federal Energy Regulatory Commission and Corporate Management employees (3,169) that support the above four strategic goals (e.g. CFO, General Counsel, etc.)

# **Financial Highlights**

The Department's financial statements, which are included in the Financial Results section of this report, received an unqualified opinion from KPMG LLP. Preparing these statements is part of the Department's goal to improve financial management and provide accurate and reliable information that is useful for assessing performance and allocating resources. The Department's management is responsible for the integrity and objectivity of the financial information presented in these financial statements.

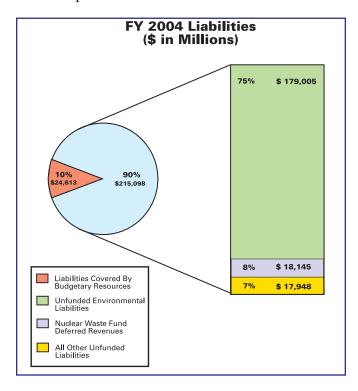
The financial statements were prepared from the Department's books and records in accordance with the formats prescribed by the Office of Management and Budget in conformity with generally accepted accounting principles (GAAP) in the United States of America. GAAP for Federal entities are the standards prescribed by the Federal Accounting Standards Advisory Board (FASAB).

**Balance Sheet.** The Department has significant unfunded liabilities that will require future appropriations to fund. The most significant of these represent ongoing efforts to cleanup environmental contamination resulting from past operations of the nuclear weapons complex. The FY 2004 environmental liability estimate totaled \$182 billion and represents one of the most technically challenging and complex cleanup efforts in the world. Estimating this liability requires making assumptions about future activities and is inherently

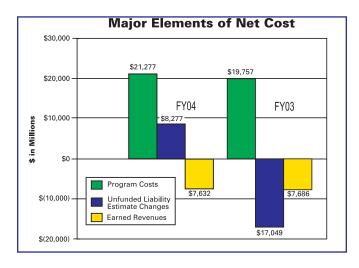


uncertain. The future course of the Department's environmental management program will depend on a number of fundamental technical and policy choices, many of which have not been made. The cost and environmental implications of alternative choices can be profound.

Cleanup estimates have been reduced in the past few years primarily due to the Department's efforts to restructure the environmental program to focus on risk and accelerate cleanup goals, and the expenditure of \$6 - \$7 billion per year on actual cleanup work.



**Net Cost of Operations.** The major elements of net cost include program costs, unfunded liability estimate changes, and earned revenues. Unfunded liability estimate changes result from inflation adjustments; improved and updated estimates; revisions in acquisition strategies, technical approach, or scope; and regulatory changes. The Department's overall net costs are dramatically impacted by these changes in environmental and other unfunded liability estimates. Since these estimates primarily relate to the cost of prior years operations, they are not included as current year program costs, but rather reported as "Costs Not



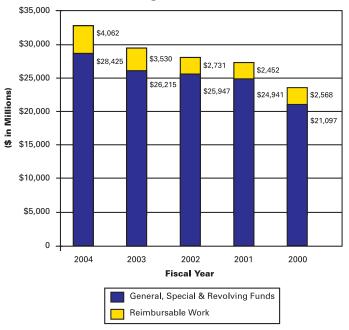
Assigned" on the Consolidated Statements of Net Cost. Program costs also exclude current-year expenditures for environmental cleanup work as those costs were accrued in prior years.

**Budgetary Resources.** The Combined Statements of Budgetary Resources provide information on the budgetary resources that were made available to the Department for the year and the status of those

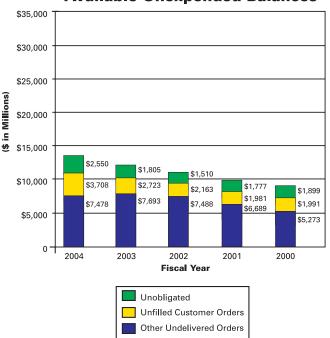
resources at the end of the fiscal year. The Department receives most of its funding from general government funds administered by the Department of the Treasury and appropriated for Energy's use by Congress. Since budgetary accounting rules and financial accounting rules may recognize certain transactions at different points in time, Appropriations Used on the Consolidated Statements of Changes in Net Position will not match costs for that period. The primary difference results from recognition of costs related to changes in unfunded liability estimates. The Consolidated Statements of Financing reconcile the accrual-based and budgetary-based information.

The Department continually analyzes its unexpended resources to ensure effective controls are in place to maximize the use of its available funding. FY 2004 increases in unfilled customer orders and unobligated balances available were primarily due to an increase in reimbursable work activities associated with the Naval Reactors Program.

#### **Obligations Incurred**



#### **Available Unexpended Balances**



# **Management Control Systems**

This section of the report provides information on the Department's compliance with the:

- Federal Managers' Financial Integrity Act of 1982
- Federal Financial Management Improvement Act of 1996

This section also includes information on the Department's efforts to improve its operations through the actions it is taking to address:

- The President's Management Agenda
- Financial and Performance Integration
- Management Challenges and Significant Issues
- Improper Payment Information Act of 2002

#### FEDERAL MANAGERS' FINANCIAL **INTEGRITY ACT OF 1982**

The Federal Managers' Financial Integrity Act (FMFIA) of 1982 requires that agencies establish management control and financial systems to provide reasonable assurance that the integrity of Federal programs and operations is protected. Furthermore, it requires that the head of the agency provide an annual assurance statement on whether the agency has met this requirement and whether any material weaknesses exist. The Secretary's FY 2004 annual assurance statement is included in his message at the beginning of this report.

In response to the FMFIA, the Department developed a management control program which holds managers accountable for the performance, productivity, operations and integrity of their programs through the use of management controls. Annually, senior managers at the Department are responsible for evaluating the adequacy of the management controls surrounding their activities and determining whether they conform to the principles and standards established by the Office

of Management and Budget and the Government Accountability Office. The results of these evaluations and other senior management information are used to determine whether there are any management control problems to be reported as material weaknesses. The Departmental Internal Control and Audit Review Council, the organization responsible for oversight of the Management Control Program, makes the final assessment and decision for the Department. For FY 2004, the Department identified no material weaknesses that place the overall control system at risk.

#### FEDERAL FINANCIAL MANAGEMENT **IMPROVEMENT ACT OF 1996**

The Federal Financial Management Improvement Act (FFMIA) of 1996 was designed to improve Federal financial management reporting by requiring that financial management systems comply substantially with three requirements: (1) Federal financial management system requirements; (2) applicable Federal accounting standards; and (3) the United States Government Standard General Ledger at the transaction level. Furthermore, the Act requires that the Independent Auditors' Report on the Department's financial statements indicate whether the agency's financial management systems comply with these requirements.

The Department has evaluated its financial management system and determined that it conforms to these governmental financial system requirements. Additionally, the Independent Auditors' Report on the Department's FY 2004 financial statements identified no instances of noncompliance. The Auditors' report is located in the Financial Results Section of this report.

#### PRESIDENT'S MANAGEMENT AGENDA

In 2001, the President challenged the Federal Government to become more efficient, effective, results-oriented, and accountable. Over the past three years, this initiative, called the President's Management Agenda (PMA), has become the framework for organizing the efforts cited by the President and focusing on the bottom line. This agenda reflects the President's commitment to achieve immediate, concrete, and measurable results that matter to the American people.

The President holds each agency accountable for its performance in carrying out the PMA. This is done through quarterly scorecards issued by OMB. Two rating categories are used – one for "status," which assesses whether a department has satisfied the overall goals or long-term criteria to accomplish an initiative and the other for "progress," which measures the extent to which the agency has followed its plan. To convey an agency's performance, the Administration developed a simple grading system of red, yellow and green.

The Department has met the President's challenge to change its approach to managing its people and its resources. When the first scorecard was issued in 2002, the Department of Energy was one of the lowest-rated agencies in the Federal Government. Two years later, in FY 2004, OMB ranked the Department of Energy as one of the top cabinet-level agencies in demonstrating progress in implementing the PMA. On the most recent scorecard, the Department achieved a "green" score in progress in each of the original five assessment areas which indicates that the Department is on track to achieve the Agenda's goals. This accomplishment is a source of pride to all the Department's employees who have demonstrated by their actions that they have embraced the spirit of the PMA.

The PMA originally identified five key government-wide areas where the opportunity to improve performance was the greatest. In addition, the Department was assigned an agency specific initiative related to research and development and, in FY 2004, one new government-wide initiative related to real property asset management was added, bringing our total to seven key opportunities for improvement. In FY 2005, the Department plans to continue our success in the areas in which we have achieved

#### FY 2004 PMA Scorecard

INITIATIVE	STATUS	PROGRESS
HUMAN CAPITAL	Green	Green
COMPETITIVE SOURCING	Green	Green
FINANCIAL PERFORMANCE	Green	Green
E-GOVERNMENT	Yellow	Green
BUDGET & PERFORMANCE INTEGRATION	Green	Green
FEDERAL REAL PROPERTY ASSET MANAGEMENT	Red	Green
RESEARCH AND DEVELOPMENT	Red	Green

a green status and aggressively pursue excellence in the remaining initiatives the President has established. These initiatives are discussed below.

Strategic Management of Human Capital -Organizations are about people, and successful organizations have the right people with the right skills in the right places at the right time to achieve their goals. The Department's major components have analyzed the employee skills needed to conduct its business and eliminated various duplicative efforts by centralizing administrative operations. For example, the Department improved responsiveness and efficiency by consolidating the business and administrative support functions from three former operation offices into a single Service Center. The Department has also restructured its performance management system to link achievement with mission accomplishment and developed comprehensive workforce and succession management plans.

*Competitive Sourcing* – Opening up the government and its functions to competition, not only with the private sector but with other units of government, will lead to better performance and better value for the taxpayer. The Department conducted comparative studies in four programmatic areas: graphics, financial services, civil rights and NNSA logistics. The financial services study alone resulted in a major re-engineering and consolidation effort which allows for staffing reductions and a projected savings of \$31 million over the next five years. One of the best ways to instill the principle of competition into the government's work is to make more and better use of the talents of small business, the backbone of America. The value of the Department's prime contracts with small businesses grew 53 percent, \$511 million to \$783 million, from FY 2001 to 2003. The number and value of subcontracts with small businesses also increased.

*Improved Financial Performance* – With access to accurate, timely and useful financial data, Federal managers can make the kind of decisions that achieve efficiencies while improving the lives of the American people. Financial data now available is far superior in quality and timeliness to that used previously and is used routinely by the Department to make major decisions regarding multi-million dollar programs and projects. For example:

- To enhance project management, the Department is establishing cost, schedule and technical baselines for its entire cleanup program with life-cycle costs over \$100 billion;
- Obligation and cost data is extracted monthly from the Department's Financial Data Warehouse and summarized for senior officials as a key management tool for program evaluation; and
- Monthly reports are now compiled using cost, schedule and performance data provided by contractors and program offices to flag projects that are under-performing, behind schedule or over projected cost parameters.

A plan for expanding the Department's data integration activities was submitted to OMB during the fourth quarter of FY 2004 and is scheduled to begin implementation during the first quarter of FY 2005. A key component of this plan is deployment of a state-of-the-art accounting system that will enable program managers to track project costs on a regular basis with significant increases in the degree of granularity. The Department plans to deploy this new accounting system, called Integrated Management Navigation System/Standard Accounting and Reporting System (I-MANAGE/STARS) in FY 2005.

Expanded Electronic Government - Information technology (IT) is a powerful, cost-effective tool that can make government services available to more citizens, reduce burdensome paperwork, and lower costs. The flagship of the Department's e-Government initiatives is the development of an integrated business management system - I-MAN-AGE. The first two components of this system, a data warehouse and a new finance/accounting system, are scheduled to become operational in FY 2005. The Department has also supported the

e-Payroll initiative by outsourcing its payroll function to the Defense Finance and Accounting Service and is working with 20 agencies to develop standardized systems in the areas of human resources and grants management. In the area of cyber security, approximately 90 percent of our information systems have been accredited as secure.

Budget and Performance Integration – Budget and management decisions should be based on whether a program is delivering the services promised in an efficient and effective manner. The Department's new strategic plan aligns the Department with its fundamental national and economic security goals. All work performed and every dollar spent must support the Department's overall mission. For each program, a 10 to 15 year plan has been developed to bridge the gap between annual budget requests and the long-term goals outlined in the Strategic Plan. The Department now tracks 255 performance targets for its programs that help measure success in achieving our strategic and program goals. Progress is assessed quarterly and failure to achieve milestones is reported as an "early warning" to senior management so that corrective action may be taken immediately. The Department also integrates performance assessment and budget decisions through use of OMB's Program Assessment Rating Tool (PART) process, although work remains on unifying PART targets and targets tracked internally by the Department. The Department also has implemented a new Planning, Programming, Budgeting and Evaluation process to support more informed resource and management decisions.

Federal Real Property Asset Management -Taxpayers have a right to expect that sound business practices are used to manage the Department's multi-billion dollar real estate portfolio. The Department is inventorying its real property assets and will use the inventory as a basis for determining which property should be maintained, costeffectively repaired, or qualified for disposal.

Research that Solves Problems – The costs and benefits of proposed Research and Development are being evaluated according to a new set of rigorous criteria. These criteria - Relevance, Quality and Performance – are used not only when justifying projects and initiatives within the Department, but also in the PART process and in budget proposals to OMB and Congress.

# MANAGEMENT CHALLENGES AND SIGNIFICANT ISSUES FACING THE DEPARTMENT

The Department carries out multiple, complex and highly diverse missions. Although the Department is continually striving to improve the efficiency and effectiveness of its programs and operations, there are some specific areas within our operations that merit a higher level of focus and attention. These areas represent the most daunting management challenges and significant issues we have in accomplishing our mission. The Consolidation Act of 2000 requires that, annually, the Inspector General (IG) prepare a statement summarizing what he considers to be the most serious management and performance challenges facing the Department. That statement is to be included in the Department's annual Performance and Accountability Report. The Inspector General's statement included in the Financial Results section of this report identifies six challenges for the Department. Similarly, in FY 2003, the Government Accountability Office (GAO) identified six major management challenges and program risks to be addressed in FY 2004.

After considering the areas identified by the IG and GAO, as well as all other critical activities within the agency, we identified nine "Significant Issues" that we believe represent the most important matters facing the Department now and in the coming years. It is our goal that resolution of our Significant Issues will help mitigate the IG and GAO management challenges as well as internally identified issues. The following chart demonstrates the relationship between the internal and external issues.

You will note that the GAO identified two areas not included by the IG or the Department. The challenges are related to revitalizing the Department's infrastructure and meeting the Nation's energy needs. While the Department recognizes the importance of both of these areas and has included these as issues in the past, based on our progress in reducing these vulnerabilities, we no longer consider these areas to be significant management problems. In the area of revitalizing our infrastructure, agency-wide requirements pertaining to infra-

#### FY 2004 MANAGEMENT CHALLENGES AND SIGNIFICANT ISSUES

IG Challenge Area	GAO Challenge Area	Significant Issue Identified by Department		
Contract Administration	Resolve problems in contract manage- ment that place agency at high risk for fraud, waste and abuse	Oversight of Contractors		
National Security	Address security threats and problems	Security		
Environmental Cleanup	Improve management for cleanup of radioactive and hazardous wastes	Environmental Cleanup		
Stockpile Stewardship	Improve management of the Nation's nuclear weapons stockpile	Stockpile Stewardship		
Information Technology Management		Information Technology Management		
Project Management		Project Management		
	Enhance leadership in meeting the Nation's energy needs			
	Revitalize infrastructure			
		Human Capital Management		
		Safety & Health		
		Nuclear Waste Disposal		

structure, incorporating industry standards endorsed by the National Academies of Sciences and Engineering, have been issued. The National Nuclear Security Administration (NNSA) has instituted Ten-Year Comprehensive Site Plans (TYCSP) which have been integrated into the budget planning cycle for each site in its complex. The Office of Science has implemented an initiative to define modernization needs, provide appropriate funding, and improve the facilities management practices. Funding requirements are being addressed in an infrastructure budget initiative instituted in FY 2004. The Department's success in addressing infrastructure has been recognized by the IG.

To meet the Nation's energy needs, the Department has also moved aggressively to implement the recommendations of the National Energy Policy (NEP)

over the last three years. We have addressed critical issues of energy supply and usage as well as energy safety and environmental impact to help ensure the nation's energy security and supported comprehensive energy legislation. The Department has also worked to provide a safe, reliable and economical supply of energy, from lighting and heating family homes to oil, gas, electricity, and other energy sources needed to power business and industry.

As previously discussed, the Department aggressively pursues corrective action for all challenges, whether externally identified by the IG or GAO or internally identified by the Department. To further highlight the Department's strategy for mitigating the previously mentioned significant management issues, the following table identifies Department's Significant Issues for FY 2004.

#### **SIGNIFICANT ISSUE**

#### **ACTIONS TAKEN** AND REMAINING

#### **EXPECTED COMPLETION**

#### OVERSIGHT OF CONTRACTORS:

Improvements are needed in the oversight of contractors managing and operating the Department's facilities. Specific oversight problems have been identified at environmental cleanup sites and laboratories conducting national security and scientific activities. Adequate oversight is needed to assure that contractor operations are effective and efficient.

An improved contract administration structure that focuses on performancebased contracts has been put in place. In FY 2004, an acquisition approach to drive performance by clearly identifying the work to be done, the Department's expectations, establishing proper incentives for its contracts, and adequately rewarding performance was implemented. In FY 2004, EM improved its acquisition approach to drive performance by clearly identifying the work to be done and the Department's expectations, establishing proper incentives for its contracts, and adequately rewarding performance. In addition, EM is ensuring performance based incentives are included in contracts so as to align with the objectives of the Accelerated Cleanup plans and to review all acquisitions strategies to ensure optimal support of the Accelerated Cleanup.

SC is in the process of revising its laboratory oversight with scientific and operational measures being linked and meaningful performance incentives being employed.

Also, the National Nuclear Security Administration is restructuring its workforce to improve the oversight of contractors managing and operating its facilities.

Correction is expected to extend into the out-years with the completion date to be reassessed in FY 2005.

# ACTIONS TAKEN AND REMAINING

# EXPECTED COMPLETION

#### SECURITY:

Unprecedented security challenges have evolved since the events of September 11, 2001. The need for improved homeland defense, highlighted by the threats of terrorism and weapons of mass destruction, created new and complex security issues that must be surmounted to ensure the protection of our critical energy resources and infrastructure. These have made it necessary for the Department to reassess and strengthen its physical and cyber security postures.

In FY 2004, the Department continued implementation of the Design Basis Threat. In March 2004, a process was established to monitor quarterly progress on site Implementation Plans through FY 2006. In May 2004, the Secretary of Energy announced a set of sweeping new initiatives to improve security across the Department's nationwide network of laboratories and defense facilities, particularly those housing weapons-grade nuclear material. These new initiatives ensure the Department has a clear strategic security plan outlining the Department's future security course, conduct ongoing threat analyses to establish the framework for continually improving security protective measures, and enhance the physical security of our facilities. Significant progress has been made to address these initiatives through a collaborative effort by all Departmental Elements. In addition, during FY 2004, the Chiles Report, "Strengthening NNSA Security Expertise, An Independent Analysis, was published and the NNSA is working toward implementation of the Chiles recommendations. The Office of Security and Safety Performance Assurance is reviewing the applicability of the Chiles recommendations for the entire Department.

The **NNSA** completed their Vulnerability Assessments in FY 2004 and developed the corresponding implementation plans for the new Design Basis Threat. Roles and responsibilities were clarified within the NNSA by establishing the Office of Defense Nuclear Security under a new Associate Administrator and preparing corrective action plans to address the recommendations provided by special study groups in security operations and personnel. It is anticipated that problems with security operations and personnel within the NNSA will be addressed through FY 2005.

Long-term correction is expected due to the continuing nature of security threats.

#### **ACTIONS TAKEN** AND REMAINING

#### **EXPECTED COMPLETION**

#### **ENVIRONMENTAL CLEANUP:**

There are significant long-term compliance and waste management problems at the Department's facilities due to past operations that left risks to the environment. Even though these issues resulted from earlier activities conducted in a different atmosphere and under less stringent standards than today, the Department is committed to maintaining compliance with current environmental laws and agreements.

Environmental cleanup continues to be a challenge that will require unprecedented funding requirements; however, significant progress has been made in cleaning up contaminated sites. Environmental Management's (EM) Top-To-Bottom Review has resulted in an aggressive approach taken to implement an accelerated cleanup strategy with an emphasis on risk reduction and continuous improvement in safety. Since the release of the resultant report, Environmental Management reduced its cleanup liability by nearly \$50 billion. The time span to complete the cleanup mission has been reduced by 35 years, from 2070 to 2035. As of September 2004, EM has completed cleanup at 76 of 114 sites. The current status of the Environmental Management program was published in the June 2004 Office of Environmental Management Closing Planning Guidance which contains all the necessary strategy and performance elements required to carry out the cleanup program by 2035.

Long-term correction expected with completion date to be reassessed in FY 2005.

#### STOCKPILE STEWARDSHIP:

Stewardship of the Nation's nuclear weapons stockpile is one of the most complex, scientifically technical programs undertaken and the Department needs to ensure that all aspects of this mission-critical responsibility are fulfilled. Based on stockpile stewardship activities, the Secretary, jointly with the Secretary of Defense, annually certifies to the President that the nuclear weapons stockpile is safe and reliable and that underground nuclear testing does not need to resume. Success is dependent upon unprecedented scientific tools to better understand the changes that occur as nuclear weapons age, enhance the surveillance capabilities for determining weapon reliability, and extend weapon lives. Department must ensure that problems in these areas are aggressively addressed.

Processes have been put in place to eliminate a backlog of surveillance tests and resolve deficiencies in the investigations conducted when weapons problems are identified. Plans and financial controls over weapons refurbishment are being strengthened with improved cost accounting in FY 2004 and individual refurbishment plans to be finalized in FY 2006. Resource loaded plans that contain cost, scope, and milestones will be implemented through FY 2005.

# ACTIONS TAKEN AND REMAINING

# EXPECTED COMPLETION

### INFORMATION TECHNOLOGY MANAGEMENT:

The Department has a decentralized approach to information technology management, limited control by the Chief Information Officer in the budgeting process, and lack of an information technology baseline to guide management decisions. These problems have impeded the Department's ability to effectively manage its information technology resources.

Management of information technology has been strengthened by making the Chief Information Officer a direct report to the Secretary and the primary official for agency information technology issues. The Department has revitalized its Information Technology Council to assist the Chief Information Officer in managing the Department's Information Technology resources. The Council conducts quarterly control reviews of the Department's major information systems to ensure that projects are performing to cost, schedule, and performance goals. In addition, the Council has chartered a specific Integrated Project Team to address management of Department's Consolidated Infrastructure Investment, with emphasis on consolidating like elements within that infrastructure where investment dollars can be saved or avoided without impact to the mission. A strategic plan targeted at Clinger-Cohen Act reforms has been developed and a FY 2004 update of the high-level enterprise architecture and the modernization blueprint were submitted to OMB in September 2004. An agency-wide directive establishing information technology requirements is in the directives review process. The Enterprise Architecture Repository has been implemented, populated with initial baseline data, and expanded to integrate the President's Management Agenda Initiatives.

#### **ACTIONS TAKEN** AND REMAINING

#### **EXPECTED COMPLETION**

#### PROJECT MANAGEMENT:

The Department needs to improve discipline and structure in approving and controlling program and baseline changes to projects and needs a Department-wide approach to certify project managers at predetermined skill levels to ensure competent management oversight of resources. In addition, it was determined that the Department needs stronger policies and controls to ensure that ongoing projects are reevaluated frequently in light of changing missions.

Large-scale Departmental projects were reviewed and analyzed to determine factors that significantly contribute to project success and/or failure. Additional data collection and analysis was completed and a final report was received in June 2004. The report helped to confirm that the current policies and practices contained in the Department's project management manual and order are sound and serve to remedy the past deficiencies within the Department.

Implementation of the program to certify contractor's earned value management systems continued during FY 2004. The Department has entered into a Memorandum of Agreement with the Defense Contract Management Agency to serve as the Department's agent for the certification review. The Department successfully reviewed and certified two contractor's earned value management systems. Those reviews served to confirm the integrity of the process being utilized. The Department has completed the implementation phase and is developing a detailed schedule to certify all major contractor systems by December 2006.

Program offices will ensure all projects are managed by certified Project Directors in accordance with Departmental guidelines.

# ACTIONS TAKEN AND REMAINING

# EXPECTED COMPLETION

#### **HUMAN CAPITAL MANAGEMENT:**

Since 1995, the Department has experienced a 27 percent reduction in the workforce. By FY 2000, up to 30 percent of the Department's critical workforce was eligible for retirement within the next 5 years. Combined with other factors such as lengthy moratoria on hiring, the relative age of the workforce, and a variety of incentives to leave Federal service, the decline in staffing has left the Department with a significant challenge: reinvesting in its human capital to ensure that the right skills, necessary to successfully meet its missions, are available.

A Departmental framework for addressing this issue was put in place with the implementation of a comprehensive human capital management strategy; an improved senior executive performance management system; a guide on developing and retaining a highly-skilled workforce; and business visions and workforce plans for all major offices.

Individual offices continue their rightsizing efforts to address their specific needs. The Office of Environmental Management has fully adopted an organizational structure designed to deliver its accelerated risk reduction and closure initiative. The National Nuclear Security Administration continues to re-engineer its workforce to streamline operations and strengthen accountability. Buyouts and increased excepted service authority; expected in FY 2006, will be used to upgrade technical capabilities.

#### **ACTIONS TAKEN** AND REMAINING

#### **EXPECTED COMPLETION**

#### SAFETY AND HEALTH:

Ensuring the safety and health of the public and the Department's workers is one of the top priorities in accomplishing our challenging scientific and national security missions. Due to the inherently critical nature of these issues, there is the need for continuous vigilance and improvement. Currently, the Department is addressing explosives safety issues and, with the ongoing re-engineering of the National Nuclear Security Administration workforce, needs to ensure that adequate focus on general safety at our laboratories and plants is maintained.

Significant actions have been taken to mitigate Safety and Health concerns. In FY 2004, the Office of Environmental Management continued to make major progress in approving and implementing improved safety bases for nuclear facilities. During FY 2004, Environmental Management approved all safety bases and implemented 96 percent. The remaining four percent will be implemented in the first quarter of FY 2005. The evaluation of these safety bases shows that the hazards associated with facility operations are properly identified, analyzed, and controlled. In addition to approving safety bases, Environmental Management headquarters and field offices are also overseeing the contractor implementation of the rule-compliant Documented Safety Analysis/Technical Safety Requirements to ensure that the identified controls are being implemented and maintained effectively.

In FY 2004, the Office of Science initiated efforts with Bureau of Labor Statistics (BLS) to identify benchmarks for safety performance and establish a best-inclass performance measure based on performance by the top 10 percent of similar research and development industries (Standard Industrial Code 873) that are tracked by BLS. These goals are institutionalized and are being incorporated into lab appraisal plans. SC's plan is to have all labs performing in the top 10% of other R&D industries by the end of FY 2007. In addition, the Office of Security and Safety Performance Assurance conducted inspections to evaluate the effectiveness of the implementation of Integrated Safety Management core functions at the activity level, the functionality of essential safety systems, oversight and assessment activities, and selected institutional systems. Several crosscutting areas have been reviewed including legacy hazards management, safety for excavations, and the Unreviewed Safety Question process. Additionally, a special investigation of worker exposures and medical services at Hanford and the River Protection Project was completed at the request of the Deputy Secretary.

# ACTIONS TAKEN AND REMAINING

# EXPECTED COMPLETION

#### NUCLEAR WASTE DISPOSAL:

A repository for the Nation's spent nuclear fuel and high-level radioactive waste has not been opened as required by the Nuclear Waste Policy Act. Delays in milestones and revisions to cost and schedule baselines have been required as a result of funding shortfalls. A mechanism needs to be established to assure the necessary funding is available to lead to waste acceptance.

Extensive scientific testing determined that Yucca Mountain, Nevada, is suitable for the disposal of spent nuclear fuel and high-level radioactive waste and, in 2002, the President designated it as the site for the Nation's first repository. While future long-standing financial commitments will be required, the Yucca Mountain project continues to make progress toward the goal of opening a deep geologic repository and beginning waste acceptance. Potential funding mechanisms and a proposed asset management strategy (Capital Asset Management Plan) to ensure the Department can complete the remaining activities for waste acceptance were developed in FY 2003 and updated in September 2004. Alternative funding legislation was submitted to Congress on February 27, 2004. Regular updates to the proposed asset management strategy will be provided to the Office of Management and Budget, as needed. With the Capital Asset Management Plan in place, and if alternative financing legislation is enacted to ensure access to the necessary funding, this significant issue will be closed prior to the opening of the repository. If this is not authorized by Congress, funding would be uncertain and will require other policy decisions and actions.

Reassessment will occur in FY 2005 upon finalization of a funding mechanism.

#### **IMPROPER PAYMENTS INFORMATION ACT OF 2002**

The PMA includes a government-wide initiative to reduce improper/erroneous payments made by the Federal Government as defined in Public Law (P.L.) No. 107-300, "Improper Payments Information Act of 2002" (IPIA). In addition, the Defense Authorization Act (P.L. 107-107) established the requirement for government agencies to carry out cost effective programs for identifying and recovering overpayments made to contractors, also known as "Recovery Auditing." The Office of Management and Budget (OMB) has established specific reporting requirements for agencies with programs that possess a significant risk of erroneous payments and for reporting on the results of recovery auditing activities.

While the Department has no programs that meet the OMB criteria for significant risk, improper payments are monitored on a quarterly basis to ensure our error rates remain at minimal levels. The Departmental erroneous payment rate has

remained at or below one percent since the inception of our tracking program in FY 2002. To support continued success, a PMA commitment was established to pursue reduction of improper payments at any one of the Department's payment sites that exceed a target rate of 1/10 of 1 percent for any quarter. Currently, the vast majority of all sites are below the target. The sites above target have identified corrective actions.

In FY 2004, the Department also established a policy for implementing recovery auditing requirements. This policy prescribes requirements for identifying overpayments to contractors and establishes reporting standards to track the status of recoveries. Our analysis of FY 2003 payment activities confirmed a low percentage of overpayments and a high recovery rate. The Department will continue to focus on both the identification and recovery of improper payments to maintain our record of low payment errors and ensure effective stewardship of public funds. Detailed information on IPIA reporting required by OMB is available in the Appendices.

Improper Payments (\$ in millions)							
	FY 2002 F		FY 2	2003	FY 2004		
	Dollars	Rate	Dollars	Rate	Dollars	Rate	
Total Payments	\$23,587		\$22,695	$\nearrow$	\$23,639		
Total Improper Payments	\$11.2	0.05%	\$13.7	0.06%	\$20.3	0.09%	

Note: In FY 2004, Federal payroll payments were excluded due to the outsourcing of the Department's Federal payroll function.

Overpayments to Contractors FY 2003 (\$ in millions)			
	Dollars		
Total Overpayments	\$ 6.0		
Total Recovered	\$ 6.0		
Total Pending Recovery	\$ 0.0		
Total Unrecoverable	\$ 0.0		
Note: Overpayment information required for prior years only.			